

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES 1 6	
2. AMENDMENT/MODIFICATION NO. 0006		3. EFFECTIVE DATE 16-Jul-2003		4. REQUISITION/PURCHASE REQ. NO. 37170091		5. PROJECT NO.(If applicable)	
6. ISSUED BY NAVAL SURFACE WARFARE CENTER, CARDEROCK CODE 3352, ROBERT COLOT 5001 SOUTH BROAD ST PHILADELPHIA PA 19112-1403		CODE N65540		7. ADMINISTERED BY (If other than item 6) See Item 6		CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)				X		9A. AMENDMENT OF SOLICITATION NO. N65540-03-R-0006	
				X		9B. DATED (SEE ITEM 11) 14-May-2003	
						10A. MOD. OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning <u>1</u> copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
A.THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.							
B.THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).							
C.THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D.OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) Answer contractor questions							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
_____ (Signature of person authorized to sign)				BY _____ (Signature of Contracting Officer)		16-Jul-2003	

EXCEPTION TO SF 30
APPROVED BY OIRM 11-84

30-105-04

STANDARD FORM 30 (Rev. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

1. The following paragraphs provide additional contractor questions regarding the solicitation and the Government's answers to the questions:

Q107. Information provided in Q49 amendment 3, relative to the Award date for the Integration and Installation Contract indicates that an award could be as late as July 2004. The delivery schedule in the RFP section F, bottom of page 35 for CLIN's 0001AJ-AM ties shock test completion to a period after the award of the Integration and Installation Contract. Also, it appears that the date of order for CLIN's 0001AJ-AM would be dependent on the award date for the Integration and Installation Contract.

If we develop the shock testing schedule according to the stated times, it would be impossible to meet the 2004 conversion schedule.

Please clarify if you still want shock testing tied to the Integration and Installation contract or should this CLIN delivery be scheduled to satisfy the ship conversion schedule. We assume that you will order CLIN's 0001AJ - AM on the date of the diesel engine replacement contract award, thereby enabling 2004 conversions. Please concur.

A107. The Government still requires shock testing tied to the Integration and Installation contract as stated in the RFP, regardless of the anticipated follow on contract award dates or as related to the FY04 conversion schedule.

Q108. Does the cost proposal for CLIN's 11,12, and 13 include:

- a) Costs of parts and supplies for preventative maintenance actions such as filters?
- b) Fluids, such as lubricating oil? If this is required, will you provide the Government cost for this?
- c) Fuel (for the total ownership costs worksheet). If this is required, will you provide the Government cost for this?

A108. CLIN's 11,12 and 13 shall include cost of parts and supplies for preventative and corrective maintenance actions.

The Contractor is not required to supply lubricating oil (i.e. MIL-L-2104). Lubricating Oil will be provided by the Government.

The Contractor is not required to supply fuel. Fuel will be provided by the Government.

Q109. Drawing 6795586 refers to two other drawings (OEW72 223610 coupling assembly diesel engine to IFVG and OEW72 98113 Installation drawing LH/RH Variator). We can not find these drawings. Could you please provide them?

A109. The Government will provide these drawings after contract award. They are not required for preparing Contractor proposals. Additional IFVG configuration drawings are provided in response to question 111 below.

Q110. Regarding the MCM propulsion unit. J1 page 10 advises that the drive interface is the Pedestal Bearing Shaft Input Flange. Please advise the dimensions (diameter, flange, bolt circle, bolt size) and centerline location (XYZ) reference to the subbase for this flange.

A110. The MCM pedestal bearing input flange is in line (horizontally and vertically) with the main reduction gear pinion (input) flange. Axially, the rear face of the pedestal bearing spool shaft is approx. 9.5" from the face of the reduction gear pinion input flange. The existing engines are aligned with approx. 0.004" to 0.012" horizontal offset from the pedestal bearing spool shaft input flange (outboard of the centerline of the reduction gear). This offset is designed to compensate for the horizontal thermal expansion of the reduction gear assembly. Vertically, the engine is in line with pedestal bearing spool shaft input flange. For estimating purposes the pedestal bearing spool shaft input flange is a nominal 10 inch diameter flange with approx. 8 equally spaced bolting holes.

Q111. Regarding the MHC propulsion unit, J1 page 10 advises that the drive interface is the Integrated Fluid Variator Gear input shaft. Please advise the dimensions (diameter, flange, bolt circle, bolt size) and centerline location (XYZ) reference to the subbase for this flange.

A111. See Attached drawings.

Q112. Some of the required tests for the SSDG engines includes test points at speeds less than rated speed (Page 56, and page 62). Because this is not a common operational point, we suggest that the test points for SSDG engines at speeds other than rated speed be dropped. Please advise?

A112. Ship service generator set endurance test (Section J, Attachment 1, par 2.10.3) and production unit cycles (Section J, Attachment 1, par 2.10.4) shall be the same as for propulsion engines except that the speed shall be 100 percent of rated speed for all load points.

Q113. So that we can adequately predict the installation impact, we need to know current performance regarding the intake, exhaust and engine room ventilation flows. For each application MCM and MHC MPDE's and SSDG's please advise the following:

- a) Installed rated power
- b) Exhaust flow and restriction at rated for existing system or exhaust flow restriction curve for exhaust system.
- c) Intake air flow and restriction at rated for existing system or intake air flow restriction curve for intake system.
- d) Engine room Ventilation airflow

A113. Installed rated power for each application shall be as described in Section J, Attachment 1, par 2.2

The Contractor proposed engine shall be capable of producing full power under the exhaust flow restriction conditions described in paragraph 2.3.2 of Section J, Attachment 1.

The Contractor proposed engine shall be capable of producing full power under the inlet air flow restriction conditions described in paragraph 2.3.2 of Section J, Attachment 1.

The engine room ventilation airflow is not required for proposal development. This information will not be provided by the Government.

Q114. Ref J1 page 18. " The contractor provided cooling system shall not adversely affect the existing shipboard cooling systems including.....".

For us to analyze any potential impact, we need to understand the interaction between the components listed, Generator, reduction gear, IFVG, Fuel cooler and Enclosure cooler and the engine cooling system. Please advise the interaction of these components and the engine cooling system. Is cooling water for the components listed expected to be in the same cooling circuit as the engine? We assume that gear oil coolers, generator cooler and other components listed obtain and discharge their cooling water separate from the engine. Please clarify.

A114. MCM MPDE and SSDG Seawater System Description. The seawater pump, located on the drive end above the flywheel, is driven by a toothed drive belt and pulley attached to a power take-off drive gear. Centrifugal action of the pump draws seawater to its center and pumps it to the jacket water cooler. As seawater flows through the jacket water cooler core, it absorbs heat from the jacket water. Heated seawater flows from the jacket water cooler to discharge pipes and then overboard. Ships with ECP A06 installed on the main engines has a thermostatic valve on the jacket water cooler discharge pipe. The thermostatic valve ports cool seawater back to the suction side of the engine driven pump. The seawater when heated above the range of the thermostatic valve element will begin porting water overboard.

MHC SSDG Seawater System Description. (Figure 3-4) Seawater to the enclosure penetration point is provided by the ships auxiliary machinery seawater cooling system. From here, it is piped to the suction side of the engine driven

seawater pump. This pump discharges to the engine water cooler, enclosure air cooler, and the fuel cooler. Seawater discharged from the water cooler is monitored in a thermostatic valve. The valve ports hot seawater overboard or partially re-circulates cool water to the pump suction until the water temperature rises above the valve's full opening range. If valves fail to operate automatically, use the manual override to send salt water overboard. Seawater leaving the air cooler passes through the generator air cooler before joining the outlet from the enclosure. All seawater piping within the enclosure is of rigid copper-nickel construction and is resiliently anchored. A seawater low pressure alarm is provided.

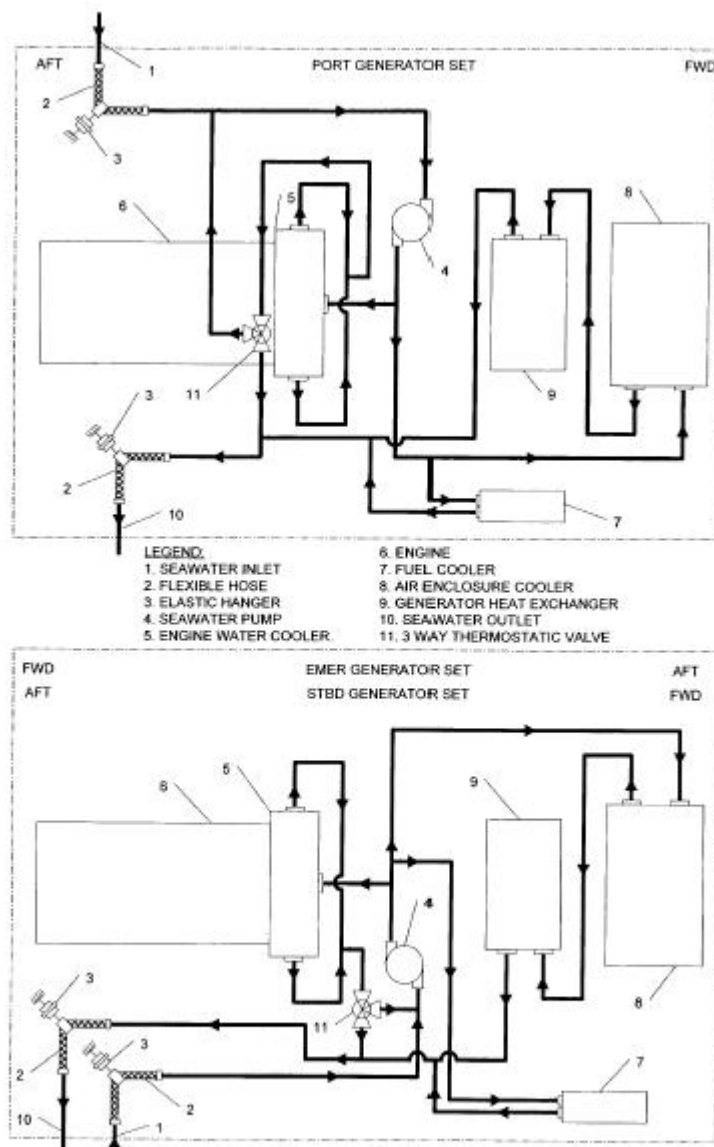


Figure 3-4. Seawater System Tubing Schematic

MHC MPDE Seawater System Description. Seawater is provided by the ship's auxiliary machinery seawater cooling system to the enclosure penetration point (figure 3-3). From here it is piped to the suction side of the engine

driven seawater pump. This pump discharges to the engine water cooler, air (enclosure) cooler, and fuel cooler. Seawater leaving the air cooler passes through the IFVG oil cooler before joining the outlet from enclosure. Orifice plates are appropriately sized and located in the piping to ensure the required flow to the various heat exchangers. All seawater piping within the enclosure is of rigid construction (made of copper-nickel) and is resiliently anchored. A low seawater pressure alarm is provided. The alarm is actuated by a pressure switch on seawater discharge pipe.

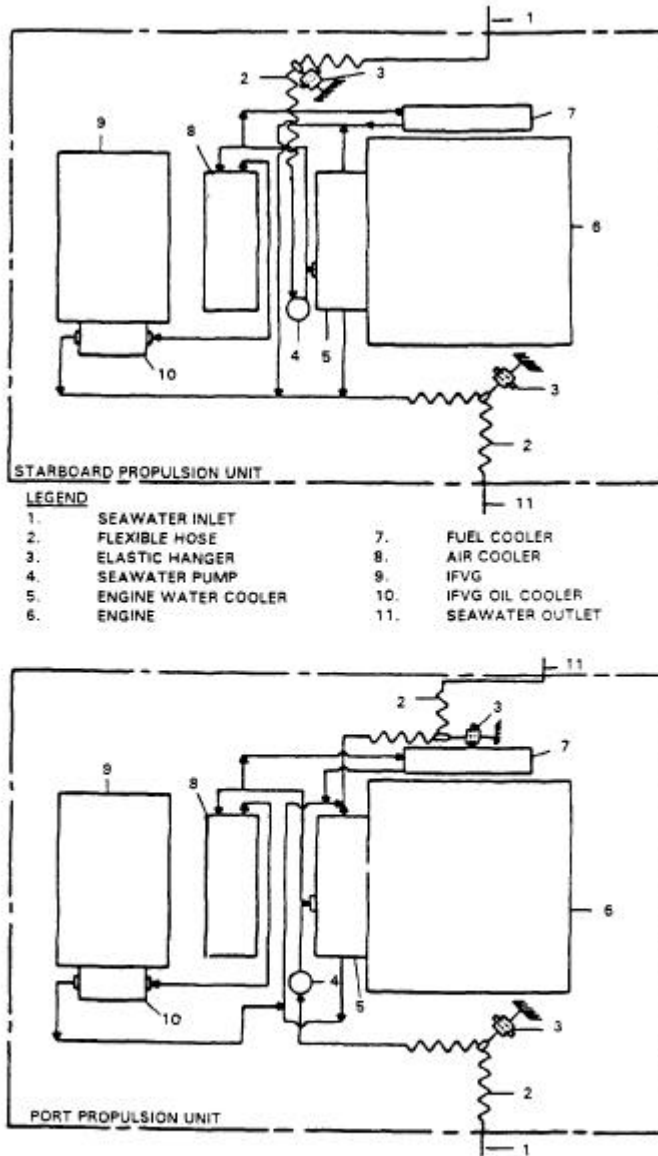


Figure 3-3. Seawater Tubing Schematic

Q115. We understand the requirement for 10 point font and double spaced throughout the proposal. In our proposal we intend to include scans of documentation such as EPA, ABS, NAVSEA certificates and letters that are not double spaced. We assume this is acceptable. Please concur.

A115. Scanned images that are not double spaced must be readable and shall be kept to a maximum of ten pages of the allowable 100 page proposal.

Attachment: General Arrangement and Center of Gravity Drawings